

ECONOMICS OF PAINTS

The best way to evaluate the cost of a coating system is to look at the cost per square meter incurred on an annual basis. For a more accurate evaluation, you should also consider the method of surface preparation, the cost of materials and type of system required.

Cost of Application

The cost of application of any coating system is based on productivity, which lies in the hands of the paint applicator. There are various other factors which have to be taken into consideration such as equipment cleaning time, physical distribution, fatigue time, material preparation...etc. The following are recommended rates for a single package of Alkyd taking the above into account:

Method	Rate – Sq. meter/hr
Spray	40 – 70
Roller	30 – 50
Brush	20 – 30

Estimating Cost of Materials

The following formula can be used for calculating the cost of the paint per coat per square meter. Waste should also be considered and may be estimated between 20 and 50% depending on the method of application.

The surface profile and the paint applicator's productivity should be put into consideration. The specified Dry Film Thickness (DFT) should be uniform and accurate. Sprayed coatings normally result in higher losses.

Cost per square meter

$$= \frac{\text{Price per liter} \times \text{DFT microns}}{\% \text{ solid cont.} \times 10}$$

According to the formula, the higher the solid content, the lower the cost and the higher the DFT, the higher the cost.

A paint low in solids may cover a large number of square meters but the paint film will be too thin to give protection.

Coverage and amounts of materials should always be calculated based on square meter per liter at recommended film thickness.